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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,346	08/23/2006	Fabien Divo	0604-1017	6743
<small>465</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			<small>7590</small> EXAMINER STULTZ, JESSICA T	
			ART UNIT 2873	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,346

Applicant(s)

DIVO, FABIEN

Examiner

Jessica T. Stultz

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/CS-100)
- Paper No(s)/Mail Date 8/23/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 (and therefore dependent claims 20-35) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 19, the phrase "the method comprising the steps consisting in:" is vague and indefinite since it is not clear if the intended meaning is "the method comprising the steps of:" or "the method consisting of the following steps". For purposes of examination, the assumed meaning is " the method comprising the steps of:".

Claims 20-35 are rejected since they inherit the indefiniteness of the claims from which they depend.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoda et al US 2001/0055111, herein referred to as Yoda et al '111.

Regarding claim 19, Yoda et al '111 discloses a method of manually centering (Section 52, Figures 17-19, wherein the center point is imaged for centering purposes), in a rim of a spectacles frame (Sections 1, 16, and 135), an ophthalmic lens (A/"1", Section 54, Figures 1-3) that is provided with at least one center and/or axis marking (Section 52, markings "3A" and "3B"), the method comprising the steps of: a) for calibration purposes, acquiring and storing the shadow of an opaque sign (Sections 68-69, opaque portions of pinhole plate "61", Figure 3)

formed on a transparent sign support (Sections 68-69, wherein pinhole plate "61" includes an opening, i.e. transparent portion, Figure 3) interposed between lighting means (Section 67, light source "58", Figure 3) and acquisition means (Section 68, image sensing unit "48", Figure 3) while said support is being illuminated on its own by said lighting means (Section 68); b) superposing said ophthalmic lens and said transparent sign support (Sections 67-69, shown in Figure 3); c) acquiring and storing the shadow of said opaque sign of said support as detected by said ophthalmic lens while said ophthalmic lens and said support are being illuminated together by said lighting means (Sections 54, 59, and 68); d) using the acquisition means to acquire the shadow of the center and/or axis marking of the ophthalmic lens for centering while it is illuminated by said lighting means (Section 52, Figures 17-19, wherein the center point is imaged for centering purposes); e) displaying on a display screen (transmission screen "66") firstly the shadow of the center and/or axis marking of the ophthalmic lens (Section 68) and secondly a virtual centering target corresponding to the position desired for the center marking of the lens relative to a reference point of the rim of the frame (Sections 53-55 and 68); f) from the prismatic deflection (Section 69) of the opaque sign as measured by comparing the acquisitions of steps a) and c), deducing a corrected relative position (Sections 51-54, 61, and 66-68, wherein the images of shadows of the ophthalmic lenses are processed to make necessary corrections) for the reference point of the frame rim relative to the center marking (Sections 42 and 44, Figures 17-19, wherein the near or far vision points are imaged) or vice versa; and g) putting the shadow of the centering marking of the ophthalmic lens into coincidence with the centering virtual target (Section 52, Figures 17-19, wherein the center point is imaged for centering purposes).

Regarding claim 20, Yoda et al '111 further discloses that steps c) to f) are performed in a loop after performing steps a) and b), so as to continuously obtain a corrected relative position for the reference point of the frame rim (Section 162, Figure 14).

Regarding claim 21, Yoda et al '111 further discloses that in step c), the shadow of the outline of the ophthalmic lens ($A''1$) for centering is acquired and in step d) there is displayed on the display screen (screen "66") firstly said shadow of the outline of the lens and secondly a virtual image representative of the corresponding rim of the frame (Sections 52-53 and 134, wherein the images are process based on lens frame shape information), being offset independently of the reference point of said frame rim relative to the centering virtual target associated with said frame rim in order to compensate for the prismatic deflections induced by the lens for centering (Section 69-70).

Regarding claim 22, Yoda et al '111 further discloses that steps c) to f) are performed in a loop after performing steps a) and b), so as to continuously obtain a corrected relative position for the reference point of the frame rim (Section 162, Figure 14).

Regarding claim 23, Yoda et al '111 further discloses that in step e), there is displayed on the display screen, firstly directly from the acquisition and analysis means, the shadows of the ophthalmic lens for centering, of the center and/or axis marking of said ophthalmic lens (Section 52, Figures 17-19, wherein the center point is imaged for centering purposes), and of the opaque sign while it is being activated, and secondly the centering virtual target, the opaque sign of the transparent sign support being activated intermittently for a duration that is short enough to ensure that the human eye does not perceive its shadow on the display screen (Sections 68-69,

wherein shadows from pinhole plate “61” are displayed on screen “66” when the light source is activated, Figure 3).

Regarding claim 24, Yoda et al ‘111 further discloses the method comprising depositing a handling peg at a predetermined location on said ophthalmic lens, account being taken of the corrected position of the reference point of the frame rim as calculated in step f) (Sections 73-75 and 179, wherein the lens is blocked to mount on a jig “200” based on the imaging processing calculations, which would inherently require a handling peg shown in Figures 5-6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda et al ‘111, as applied to independent claims 19 above, in view of Yanagi et al US 5,867,259, herein referred to as Yanagi et al ‘259.

Regarding claims 25-26, Yoda et al ‘111 further discloses a centering and blocking device for implementing the method as shown above, the device comprising: receiver means (Sections 60-62, lens holder “37”/“57”) for receiving the ophthalmic lens (A’/“1”); on either side of said receiver means, firstly lighting means (Sections 60-61, “31”/“58”) for illuminating the ophthalmic lens installed on said receiver means, and secondly acquisition and analysis means (Sections 46 and 59, image screen “40” and image sensing unit “48”, Figures 1-3) for acquiring and analyzing the light transmitted through said ophthalmic lens (Sections 54 and 59); and

a transparent support (124) including an opaque sign representing a geometrical figure (Sections 68-69, wherein pinhole plate “61” includes an opening, i.e. transparent portion, and opaque portions, Figure 3), and it would have been obvious that the geometrical figure has a maximum outside dimension lying in the range 2 mm to 10 mm and occupies an area lying in the range 3 mm² to 80 mm² for the purpose of providing shadows close to the lens markings since it has been held that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, which is the case with the instant invention. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Yoda et al ‘111 also does not specifically disclose that the transparent support is activatable and deactivatable, and that is disposed between said receiver means and said acquisition and analysis means. In the same field of endeavor of measuring shadows on ophthalmic lenses (Abstract), Yanagi et al ‘259 teaches of a transparent sign support (Column 6, lines 16-55, wherein the transparent sign support is patterning plate “23”, Figures 8-9) located between a receiver means (“104”) and an acquisition means (“27”), wherein the transparent sign support is activatable and deactivatable (Column 8, lines 38-50, wherein the patterning plate is a liquid crystal shutter). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Yanagi et al ‘259 with the device of Yoda et al ‘111 for the purpose of observing optical characteristics of the lens based on hidden marks on the lenses (Column 2, line 50-Column 3, line 6).

Regarding claim 27, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the geometrical figure is of a shape different from a point or a cross, being suitable for being distinguished visually from a marking made on an ophthalmic lens (Figure 9).

Regarding claim 28, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the geometrical figure is a polygon (Figure 9).

Regarding claim 29, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and it would have been obvious to one having ordinary skill in the art at the time the invention was made for the geometrical figure for the purpose of differentiating from the lens markings of Yoda et al '111 (i.e. circles and lines) to be an oval since it has been held that that a mere change in the shape of a device would have been obvious absent persuasive evidence that the claimed configuration is significant, which is the case in the instant application, since there is no evidence that the shape of the geometrical figure is significant to the invention. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 30, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yoda et al '111 further disclose a device in which said receiver means, said lighting means, said acquisition means, and said measurement means are held stationary relative to one another (Shown in Figures 1-3, wherein even though screen "40" rotates, it is held in the same position relative to the other means).

Regarding claim 31, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yoda et al '111 further discloses a device having a single light path

between said lighting means and said acquisition and analysis means (Shown in Figures 1-3, wherein a single light path exists between light source "31" and acquisition means "40").

Regarding claim 32, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the sign support is a transparent active screen suitable for selectively displaying the geometrical figure (Column 6, lines 34-41, opaque sign comprises light shielding portion "23B" and transparent portions "23C" and Column 8, lines 38-50).

Regarding claim 33, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the transparent screen is a liquid crystal screen (Column 8, lines 38-50, wherein the patterning plate is a liquid crystal shutter).

Regarding claim 34, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the sign support has a regular array of repeated patterns (Figure 9).

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda et al '111 in view of Yanagi et al '259, as applied to claims 25-34 above, and further in view of Devie et al US 2003/0112426, herein referred to as Devie et al '426.

Regarding claim 35, Yoda et al '111 and Yanagi et al '259 disclose and teach of the device as shown above, but do not specifically disclose that the transparent sign support comprises a Hartmann matrix. In the same field of endeavor of measuring characteristics of ophthalmic lenses (Sections 2, 6, and 69), Devie et al '426 teaches of a sign support that comprises a Hartmann matrix (Section 58). Therefore it would have been obvious to one having

ordinary skill in the art to combine the teaching of Devie et al '426 with the device and method of Yoda et al '111 and Yanagi et al '259 for the purpose of determining the optical characteristics of the lens (specifically the wavefront characteristics of the lens in Devie et al '426) from light transmitted through the lens (Sections 3, 52, and 58).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gravell US 4,019,285, Albert-Garcia US 5,428,448, and Videcoq US 7,191,030 are cited as having some similar structure to the claimed invention since they disclose devices for measuring optical characteristics of lenses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T. Stultz whose telephone number is (571) 272-2339. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2873

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jessica T Stultz
Primary Examiner
Art Unit 2873

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